condition of education 2001



INDICATOR 45

Overcrowding in Schools

The indicator and corresponding tables are taken directly from *The Condition of Education 2001*. Therefore, the page numbers may not be sequential.

Additional information about the survey data and supplementary notes can be found in the full report. For a copy of *The Condition of Education 2001*, visit the NCES web site (http://nces.ed.gov/pubsearch/pubsinfo.asp?pubid=2001072) or contact ED PUBs at 1-877-4ED-PUBS.

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NATIONAL CENTER FOR EDUCATION STATISTICS



School Climate and Discipline

Overcrowding in Schools

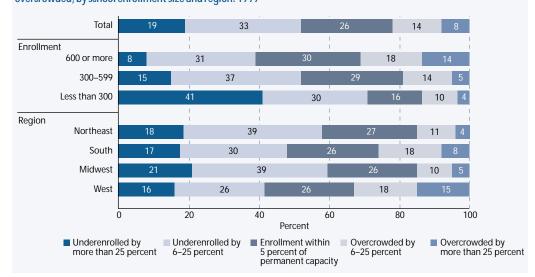
About half of all public schools were enrolled at less than capacity in 1999, but one in five was overcrowded. Schools with 600 or more students were more likely to be severely overcrowded than smaller schools.

Overcrowded schools are a challenge to education because enrollments have increased to record levels and are not expected to decrease significantly in the future (Indicator 2). Overcrowding is a cause for concern because research suggests that gains in student achievement (especially for disadvantaged students) are greater in classes with 13-20 students than in larger classes (Krueger 1999; Finn 1998; Achilles 1996). In schools without sufficient temporary classroom space, overcrowding can increase class size (Rivera-Batiz and Marti 1995). Overcrowded schools are more likely than underenrolled schools or schools within 5 percent of their enrollment capacity to have at least one onsite building and one building feature, such as plumbing or heating, in less than adequate condition (NCES 2000-032) (see supplemental table 45-1).

In 1999, 22 percent of public schools reported being overcrowded (i.e., enrolling more than 5 percent above the number of students the school was designed to accommodate in its permanent facilities). Eight percent reported being severely overcrowded (i.e., enrolling more than 25 percent above permanent capacity). About one-half of schools (52 percent) were underenrolled (i.e., enrolled more than 5 percent below permanent capacity).

The proportion of schools reporting severe overcrowding in 1999 differed somewhat by enrollment size, percent minority enrollment in the school, and geographic region. Schools with enrollments of 600 or more students were more likely to be severely overcrowded than schools with lower enrollments. Severe overcrowding was also more likely in schools with more than 50 percent minority enrollment than in schools with minority enrollment of 21-50 percent or less than 5 percent. Severely overcrowded schools were more common in the West than in the Northeast or Midwest, but apparent differences in the distribution of such schools were not statistically significant by locale (urban, suburban, or rural); instructional level (elementary, secondary, or combined); or the percentage of students eligible for free or reduced-price school lunch (see supplemental table 45-2).

SCHOOL ENROLLMENTS: Percentage distribution of public schools reporting that they are underenrolled, at capacity, or overcrowded, by school enrollment size and region: 1999



NOTE: Percentages may not add to 100 due to rounding.

SOURCE: U.S. Department of Education, NCES. Fast Response Survey System (FRSS), Condition of America's Public School Facilities: 1999 (NCES 2000-032), 2000.

FOR MORE INFORMATION: Supplemental Notes 1, 8 Supplemental Tables 45-1, 45-2 NCES 2000-032 Achilles 1996; Finn 1998; Krueger 1999; Rivera-Batiz and Marti 1995

Table 45-1 Percentage of public schools with an inadequate or unsatisfactory building, building feature, or environmental feature, by categories of underenrolled and overcrowded: 1999

	Unde More than	erenrolled		Overcrowded More than	
Condition of facility ¹	25 percent under capacity	6-25 percent under capacity	Within 5 percent of capacity	6-25 percent over capacity	25 percent over capacity
At least one type of onsite building	, ,	, ,			' -
in less than adequate condition ²	17	19	19	43	45
At least one building feature					
in less than adequate condition ³	50	46	48	61	59
At least one environmental factor					
in unsatisfactory condition ⁴	42	41	39	57	46

¹Categories for condition are not mutually exclusive.

²The condition of all onsite buildings is computed across original buildings, permanent additions, and temporary buildings. Ratings of "less than adequate" encompass the ratings of "fair," "poor," and "replace." The condition of all building features is computed across nine building features (e.g., roofs, plumbing). Ratings of "less than adequate" encompass the ratings of "fair," "poor," and "replace."

[&]quot;The condition of all environmental factors is computed across six environmental factors (e.g., heating, ventilation). Ratings of "unsatisfactory" include the ratings of "unsatisfactory" and "very unsatisfactory." SOURCE: U.S. Department of Education, NCES. Fast Response Survey System (FRSS), Condition of America's Public School Facilities: 1999 (NCES 2000-032), 2000, and unpublished data.

Table 45-2 Percentage distribution of public schools reporting that they are underenrolled, at capacity, or overcrowded, by selected school characteristics:

	Underenrolled			Overcrowded	
	More than				More than
	25 percent	6-25 percent	Within 5 percent	6-25 percent	25 percent
Characteristic	under capacity	under capacity	of capacity	over capacity	over capacity
Total	19	33	26	14	8
Instructional level					
Elementary	17	31	28	15	8
Secondary	21	43	17	11	8
Combined	33	21	31	9	* 6
Enrollment					
Less than 300	41	30	16	10	4
300- 599	15	37	29	14	5
600 or more	8	31	30	18	14
Locale					
Central city	16	33	24	15	11
Urban fringe/large town	12	36	28	17	8
Rural/small town	27	30	26	11	6
Region					
Northeast	18	39	27	11	4
South	17	30	26	18	8
Midwest	21	39	26	10	5
West	16	26	26	18	15
Percent minority					
Less than 5	23	38	23	12	4
6- 20	11	38	26	16	8
21- 50	19	30	27	18	6
More than 50	18	24	30	13	15
Percentage of students eligible for					
free or reduced-price school lunch					
Less than 20	15	38	24	16	6
20- 39	19	34	26	13	8
40- 69	15	33	29	16	7
70 or more	27	26	24	12	12

^{*} This estimate is unreliable because it has a coefficient of variation greater than 50 percent.

NOTE: Percentages may not add to 100 due to rounding. Some differences that appear large may not be statistically significant due to large standard errors relative to the size of the estimates. SOURCE: U.S. Department of Education, NCES. Fast Response Survey System (FRSS), Condition of America's Public School Facilities: 1999 (NCES 2000–032), 2000, and unpublished data.

Table S45 Standard errors for the percentage distribution of public schools reporting that they are underenrolled, at capacity, or overcrowded, by school enrollment size and region: 1999

	Underenrolled			Overcrowded	
	More than				More than
	25 percent	6-25 percent	Within 5 percent	6-25 percent	25 percent
Characteristic	under capacity	under capacity	of capacity	over capacity	over capacity
Total	1.5	1.7	1.5	1.2	0.9
Enrollment					
600 or more	1.4	3.4	2.0	1.6	1.8
300-599	2.5	2.8	2.6	2.5	1.2
Less than 300	5.0	4.2	3.4	2.9	1.6
Region					
Northeast	3.3	4.2	4.3	3.9	1.6
South	3.0	2.7	2.9	2.1	1.6
Midwest	3.0	3.5	2.8	2.1	1.5
West	3.2	3.3	3.1	3.2	2.7

SOURCE: U.S. Department of Education, NCES. Fast Response Survey System (FRSS), Condition of America's Public School Facilities: 1999 (NCES 2000-032), 2000, and unpublished data.

Table S45-1 Standard errors for the percentage of public schools with an inadequate or unsatisfactory building, building feature, or environmental feature, by categories of underenrolled and overcrowded: 1999

Underenrolled			Overcrowded	
More than 25 percent under capacity	6–25 percent under capacity	Within 5 percent of capacity	6-25 percent over capacity	More than 25 percent over capacity
3.8	2.3	3.5	4.3	6.6
5.0	3.0	3.2	4.9	5.9
5.0	3.3	3.8	4.5	5.7
	More than 25 percent under capacity 3.8	More than 25 percent under capacity 6–25 percent under capacity 2.3 3.8 2.3 5.0 3.0	More than 25 percent under capacity 3.8	More than 25 percent under capacity 3.8 2.3 3.0 3.0 3.0 3.0 3.0 3.0 3.0

SOURCE: U.S. Department of Education, NCES. Fast Response Survey System (FRSS), Condition of America's Public School Facilities: 1999 (NCES 2000-032), 2000, and unpublished data.

Table S45-2 Standard errors for the percentage distribution of public schools reporting that they are underenrolled, at capacity, or overcrowded, by selected school characteristics: 1999

Characteristic More than under capacity under capacity of ca		Underenrolled			Overcrowded	
Characteristic under capacity under capacity of capacity over capacity over capacity Total 1.5 1.7 1.5 1.2 0.9 Instructional level Image: comparity 1.7 2.1 2.0 1.5 1.1 Secondary 2.7 3.0 1.9 1.9 1.8 Combined 9.1 7.7 7.6 4.4 3.4 Errollment Image: colspan="3">Image: colspan="3">I		More than				More than
Total 1.5 1.7 1.5 1.2 0.9 Instructional level Elementary 1.7 2.1 2.0 1.5 1.1 Secondary 2.7 3.0 1.9 1.9 1.8 Combined 9.1 7.7 7.6 4.4 3.4 Enrollment Less than 300 5.0 4.2 3.4 2.9 1.6 800 or more 1.4 3.4 2.0 1.6 1.8 Locale Central city 3.0 3.3 2.9 1.8 2.3 Urban fringe/large town 2.0 3.0 2.8 2.0 1.6 1.8 Region 2.7 3.2 2.4 2.4 2.3 1.6 Northeast 3.3 4.2 4.3 3.9 1.6 South 3.0 2.7 2.9 2.1 1.6 Midwest 3.0 3.5 2.8 2.1 1.5 West 3.2		25 percent	6-25 percent	Within 5 percent	6-25 percent	25 percent
Elementary			under capacity		over capacity	over capacity
Page	Total	1.5	1.7	1.5	1.2	0.9
Secondary 2.7 3.0 1.9 1.9 1.8 Combined 9.1 7.7 7.6 4.4 3.4 Enrollment	Instructional level					
Combined 9.1 7.7 7.6 4.4 3.4 Enrollment	Elementary	1.7	2.1	2.0	1.5	1.1
Less than 300 5.0 4.2 3.4 2.9 1.6 300-599 2.5 2.8 2.6 2.5 1.2 600 or more 1.4 3.4 2.0 1.6 1.8 Locale	Secondary	2.7	3.0	1.9	1.9	1.8
Less than 300 5.0 4.2 3.4 2.9 1.6 300-599 2.5 2.8 2.6 2.5 1.2 600 or more 1.4 3.4 2.0 1.6 1.8 Locale Central city 3.0 3.3 2.9 1.8 2.3 Urban fringe/large town 2.0 3.0 2.8 2.0 1.6 Rural/small town 2.7 3.2 2.4 2.4 1.3 Region Northeast 3.3 4.2 4.3 3.9 1.6 South 3.0 2.7 2.9 2.1 1.6 Midwest 3.0 3.5 2.8 2.1 1.5 West 3.2 3.3 3.1 3.2 2.7 Less than 5 3.1 3.0 2.5 3.0 1.2 6-20 2.7 3.7 3.6 3.1 2.1 21-50 3.8 3.4 3.8 2.4 1.5	Combined	9.1	7.7	7.6	4.4	3.4
300-599 2.5 2.8 2.6 2.5 1.2 600 or more 1.4 3.4 2.0 1.6 1.8 Locale Central city 3.0 3.3 2.9 1.8 2.3 Urban fringe/large town 2.0 3.0 2.8 2.0 1.6 Rural/small town 2.7 3.2 2.4 2.4 2.1 1.6 Region Northeast 3.3 4.2 4.3 3.9 1.6 South 3.0 2.7 2.9 2.1 1.6 Midwest 3.0 3.5 2.8 2.1 1.5 West 3.2 3.3 3.1 3.2 2.7 Percent minority Less than 5 3.1 3.0 2.5 3.0 1.2 4-20 2.7 3.7 3.6 3.1 2.1 215.0 3.8 3.4 3.8 2.4 1.5 More than 50 2.8 3.3	Enrollment					
600 or more 1.4 3.4 2.0 1.6 1.8 Locale Central city 3.0 3.3 2.9 1.8 2.3 Urban fringe/large town 2.0 3.0 2.8 2.0 1.6 Rural/small town 2.7 3.2 2.4 2.4 2.1 1.6 Region 3.0 4.2 4.3 3.9 1.6	Less than 300	5.0	4.2	3.4	2.9	1.6
Locale Central city 3.0 3.3 2.9 1.8 2.3 Urban fringe/large town 2.0 3.0 2.8 2.0 1.6 Rural/small town 2.7 3.2 2.4 2.4 1.3 Region <td>300-599</td> <td>2.5</td> <td>2.8</td> <td>2.6</td> <td>2.5</td> <td>1.2</td>	300-599	2.5	2.8	2.6	2.5	1.2
Central city 3.0 3.3 2.9 1.8 2.3 Urban fringe/large town 2.0 3.0 2.8 2.0 1.6 Rural/small town 2.7 3.2 2.4 2.4 1.3 Region	600 or more	1.4	3.4	2.0	1.6	1.8
Urban fringe/large town 2.0 3.0 2.8 2.0 1.6 Rural/small town 2.7 3.2 2.4 2.4 1.3 Region Northeast 3.3 4.2 4.3 3.9 1.6 South 3.0 2.7 2.9 2.1 1.6 Midwest 3.0 3.5 2.8 2.1 1.5 West 3.2 3.3 3.1 3.2 2.7 Percent minority Less than 5 3.1 3.0 2.5 3.0 1.2 6-20 2.7 3.7 3.6 3.1 2.1 21-50 3.8 3.4 3.8 2.4 1.5 More than 50 2.8 3.3 3.5 2.4 2.7 Percentage of students eligible for free or reduced-price school lunch 2.4 3.2 3.3 2.8 1.6 Less than 20 2.4 3.2 3.3 2.8 1.6 20-39 3.1 3.2 3.0 2.4 1.8 40-69 2.7 4.0 3.4 </td <td>Locale</td> <td></td> <td></td> <td></td> <td></td> <td></td>	Locale					
Rural/small town 2.7 3.2 2.4 2.4 1.3 Region Northeast 3.3 4.2 4.3 3.9 1.6 South 3.0 2.7 2.9 2.1 1.6 Midwest 3.0 3.5 2.8 2.1 1.5 West 3.2 3.3 3.1 3.2 2.7 Percent minority Less than 5 3.1 3.0 2.5 3.0 1.2 6-20 2.7 3.7 3.6 3.1 2.1 21-50 3.8 3.4 3.8 2.4 1.5 More than 50 2.8 3.3 3.5 2.4 2.7 Percentage of students eligible for free or reduced-price school lunch 2.4 3.2 3.3 2.8 1.6 Less than 20 2.4 3.2 3.0 2.4 1.8 40-69 2.7 4.0 3.4 2.6 2.0	Central city	3.0	3.3	2.9	1.8	2.3
Region Northeast 3.3 4.2 4.3 3.9 1.6 South 3.0 2.7 2.9 2.1 1.6 Midwest 3.0 3.5 2.8 2.1 1.5 West 3.2 3.3 3.1 3.2 2.7 Percent minority 2.5 3.0 1.2 2.2 2.2 3.0 1.2 2.2 3.0 1.2 2.2 3.0 1.2 2.2 3.2 3.3 2.4 1.5 3.1 2.1 2.2 2.2 3.3 3.5 2.4 2.7 2.2 2.2 3.2 3.3 3.5 2.4 2.7 2.7 3.7 3.6 3.1 2.1 2.1 2.5 3.0 3.1 2.1 2.1 2.2 3.3 3.5 2.4 2.7 2.7 2.7 3.7 3.6 3.1 2.4 2.7 2.7 2.7 2.7 3.3 3.5 2.4 2.7 2.7 2.7 2.7 3.3 3.5 2.4 2.7 2.7 3.2 3.3 <t< td=""><td>Urban fringe/large town</td><td>2.0</td><td>3.0</td><td>2.8</td><td>2.0</td><td>1.6</td></t<>	Urban fringe/large town	2.0	3.0	2.8	2.0	1.6
Northeast 3.3 4.2 4.3 3.9 1.6 South 3.0 2.7 2.9 2.1 1.6 Midwest 3.0 3.5 2.8 2.1 1.5 West 3.2 3.3 3.1 3.2 2.7 Percent minority 2.8 3.1 3.0 2.5 3.0 1.2 6-20 2.7 3.7 3.6 3.1 2.1 21-50 3.8 3.4 3.8 2.4 1.5 More than 50 2.8 3.3 3.5 2.4 2.7 Percentage of students eligible for free or reduced-price school lunch 2.4 3.2 3.3 2.8 1.6 20-39 3.1 3.2 3.0 2.4 1.8 40-69 2.7 4.0 3.4 2.6 2.0	Rural/small town	2.7	3.2	2.4	2.4	1.3
South 3.0 2.7 2.9 2.1 1.6 Midwest 3.0 3.5 2.8 2.1 1.5 West 3.2 3.3 3.1 3.2 2.7 Percent minority 2.5 3.0 1.2 2.2 3.0 2.5 3.0 1.2 6-20 2.7 3.7 3.6 3.1 2.1 21-50 3.8 3.4 3.8 2.4 1.5 More than 50 2.8 3.3 3.5 2.4 2.7 Percentage of students eligible for free or reduced-price school lunch 2.4 3.2 3.3 2.8 1.6 Less than 20 2.4 3.2 3.3 2.8 1.6 20-39 3.1 3.2 3.0 2.4 1.8 40-69 2.7 4.0 3.4 2.6 2.0	Region					
Midwest 3.0 3.5 2.8 2.1 1.5 West 3.2 3.3 3.1 3.2 2.7 Percent minority 3.1 3.0 2.5 3.0 1.2 6-20 2.7 3.7 3.6 3.1 2.1 21-50 3.8 3.4 3.8 2.4 1.5 More than 50 2.8 3.3 3.5 2.4 2.7 Percentage of students eligible for free or reduced-price school lunch 2.4 3.2 3.3 2.8 1.6 20-39 3.1 3.2 3.0 2.4 1.8 40-69 2.7 4.0 3.4 2.6 2.0	Northeast	3.3	4.2	4.3	3.9	1.6
West 3.2 3.3 3.1 3.2 2.7 Percent minority 2.5 3.0 1.2 6-20 2.7 3.7 3.6 3.1 2.1 21-50 3.8 3.4 3.8 2.4 1.5 More than 50 2.8 3.3 3.5 2.4 2.7 Percentage of students eligible for free or reduced-price school lunch 2.4 3.2 3.3 2.8 1.6 20-39 3.1 3.2 3.0 2.4 1.8 40-69 2.7 4.0 3.4 2.6 2.0	South	3.0	2.7	2.9	2.1	1.6
Percent minority Less than 5 3.1 3.0 2.5 3.0 1.2 6-20 2.7 3.7 3.6 3.1 2.1 21-50 3.8 3.4 3.8 2.4 1.5 More than 50 2.8 3.3 3.5 2.4 2.7 Percentage of students eligible for free or reduced-price school lunch 2.4 3.2 3.3 2.8 1.6 Less than 20 2.4 3.2 3.0 2.4 1.8 20-39 3.1 3.2 3.0 2.4 1.8 40-69 2.7 4.0 3.4 2.6 2.0	Midwest	3.0	3.5	2.8	2.1	1.5
Less than 5 3.1 3.0 2.5 3.0 1.2 6-20 2.7 3.7 3.6 3.1 2.1 21-50 3.8 3.4 3.8 2.4 1.5 More than 50 2.8 3.3 3.5 2.4 2.7 Percentage of students eligible for free or reduced-price school lunch 5.2 3.2 3.3 2.8 1.6 20-39 3.1 3.2 3.0 2.4 1.8 40-69 2.7 4.0 3.4 2.6 2.0	West	3.2	3.3	3.1	3.2	2.7
6-20 2.7 3.7 3.6 3.1 2.1 21-50 3.8 3.4 3.8 2.4 1.5 More than 50 2.8 3.3 3.5 2.4 2.7 Percentage of students eligible for free or reduced-price school lunch Less than 20 2.4 3.2 3.3 2.8 1.6 20-39 3.1 3.2 3.0 2.4 1.8 40-69 2.7 4.0 3.4 2.6 2.0	Percent minority					
21-50 3.8 3.4 3.8 2.4 1.5 More than 50 2.8 3.3 3.5 2.4 2.7 Percentage of students eligible for free or reduced-price school lunch Less than 20 2.4 3.2 3.3 2.8 1.6 20-39 3.1 3.2 3.0 2.4 1.8 40-69 2.7 4.0 3.4 2.6 2.0	Less than 5	3.1	3.0	2.5	3.0	1.2
More than 50 2.8 3.3 3.5 2.4 2.7 Percentage of students eligible for free or reduced-price school lunch Less than 20 2.4 3.2 3.3 2.8 1.6 20-39 3.1 3.2 3.0 2.4 1.8 40-69 2.7 4.0 3.4 2.6 2.0	6-20	2.7	3.7	3.6	3.1	2.1
Percentage of students eligible for free or reduced-price school lunch Less than 20 2.4 3.2 3.3 2.8 1.6 20-39 3.1 3.2 3.0 2.4 1.8 40-69 2.7 4.0 3.4 2.6 2.0	21-50	3.8	3.4	3.8	2.4	1.5
free or reduced-price school lunch Less than 20 2.4 3.2 3.3 2.8 1.6 20-39 3.1 3.2 3.0 2.4 1.8 40-69 2.7 4.0 3.4 2.6 2.0	More than 50	2.8	3.3	3.5	2.4	2.7
Less than 20 2.4 3.2 3.3 2.8 1.6 20-39 3.1 3.2 3.0 2.4 1.8 40-69 2.7 4.0 3.4 2.6 2.0	Percentage of students eligible for					
20-39 3.1 3.2 3.0 2.4 1.8 40-69 2.7 4.0 3.4 2.6 2.0	free or reduced-price school lunch					
40-69 2.7 4.0 3.4 2.6 2.0	Less than 20	2.4	3.2	3.3	2.8	1.6
	20-39	3.1	3.2	3.0	2.4	1.8
70 or more 4.0 4.1 3.9 2.6 2.9	40-69	2.7	4.0	3.4	2.6	2.0
	70 or more	4.0	4.1	3.9	2.6	2.9

SOURCE: U.S. Department of Education, NCES. Fast Response Survey System (FRSS), Condition of Americas Public School Facilities: 1999 (NCES 2000 – 032), 2000, and unpublished data.